

REMARKS

The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

Drawings

FIG. 2 of the drawings has been amended. Support for the amendment is found in paragraph [0013]. Paragraph [0013] has also been amended to reference operation 240. Applicants respectfully request that these amendments be approved and entered.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

35 U.S.C. §102(e) Rejection - Nicholson

The Examiner has rejected claims 1-33 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application No. 2004/0153694 issued to Nicholson et al. (hereinafter referred to as “Nicholson”). The Applicants respectfully submit that the present claims are allowable over Nicholson.

Claim 1 recites a method, comprising “*requesting an operating system to place a computer system in a hibernation mode; gathering a state of the computer system; storing the system state to a first non-volatile memory of the computer system; and storing the system state to a second non-volatile memory of the computer system, wherein the second non-volatile memory is internal to the computer system*”.

Nicholson does not teach or suggest these limitations. In particular, Nicholson does not teach or suggest wherein the second non-volatile memory is internal to the computer system.

In rejecting former claim 1, the Examiner has apparently relied upon step 714 of Figure 7 of Nicholson. See e.g., the rejection of claim 1 of the present Office Action. However, step 714 pertains to storing remaining data and configuration data on the **remote** storage volume. The remote storage volume is not **internal** to the computer system.

Anticipation under 35 U.S.C. Section 102 requires every element of the claimed invention be identically shown in a single prior art reference. The Federal Circuit has indicated that the standard for measuring lack of novelty by anticipation is strict identity. “*For a prior art reference to anticipate in terms of 35 U.S.C. Section 102, every element*

of the claimed invention must be identically shown in a single reference.” In *Re Bond*, 910 F.2d 831, 15 USPQ.2d 1566 (Fed. Cir. 1990).

For at least these reasons, claim 1 and its dependent claims are believed to be allowable over Nicholson.

Claim 8 recites a method, comprising “*requesting that a computer system be placed in a hibernation mode; writing a state of the system to a hard disk drive of the computer system having a non-volatile memory cache; storing the state of the system to the hard disk drive cache; and reducing power of the hard disk drive*”

Nicholson does not teach or suggest these limitations. In particular, Nicholson does not teach or suggest either **reducing power of a hard disk drive having a non-volatile memory cache**.

In rejecting former claim 8, the Examiner has apparently relied upon the remote boot server having the cache of the non-volatile memory discussed at paragraph [0010]. However, there is no teaching or suggestion of reducing the power of the boot server having the cache of the non-volatile memory.

For at least these reasons, claim 8 and its dependent claims are believed to be allowable over Nicholson.

Claim 12 recites a method, comprising “*requesting that a computer system having a hard disk drive and a non-volatile memory coupled to the hard disk drive be placed in a hibernation mode; determining an address location of the non-volatile memory; writing contents of a central processing unit to the non-volatile memory; and reducing power of the hard disk drive*”.

Nicholson does not teach or suggest these limitations. In particular, Nicholson does not teach or suggest **reducing power of a hard disk drive that is coupled to a non-volatile memory to which contents of a central processing unit are written.**

In rejecting former claim 12, the Examiner has apparently relied upon reference 183 of Figure 1 of Nicholson. However, there is no teaching or suggestion of reducing power of the reference 183 of Figure 1 of Nicholson.

For at least these reasons, claim 12 and its dependent claims are believed to be allowable over Nicholson.

Claim 26 recites a computer, comprising “*an **internal hard drive; means for storing a state of the computer to a non-volatile memory and storing the state of the computer to the hard drive before power down; and means for loading the state of the computer from the non-volatile memory***”.

Nicholson does not teach or suggest these limitations. For at least these reasons, claim 26 and its dependent claims are believed to be allowable over Nicholson.

Claim 30 recites in part “*write contents of a central processing unit (CPU) to a non-volatile memory that has a same address configuration as a hard disk drive of a mobile or desktop computer prior to being placed in a hibernation mode; and write data from a random access memory to the non-volatile memory prior to being placed in the hibernation mode*”.

Nicholson does not teach or suggest these limitations. For at least these reasons, claim 26 and its dependent claims are believed to be allowable over Nicholson.

35 U.S.C. §103(a) Rejection - Nicholson

The Examiner has rejected claims 20-25 under 35 U.S.C. §103(a) as being unpatentable over Nicholson. The Applicants respectfully submit that the present claims are allowable over Nicholson.

Claim 20 recites a system, comprising “*a central processing unit (CPU); a main memory coupled to the CPU, wherein the main memory stores data to be manipulated by the CPU; a first non-volatile memory coupled to the main memory, wherein the data of the main memory is stored to the first non-volatile memory if the system is placed in a hibernation mode; and a second **internal** non-volatile memory coupled to the first non-volatile memory, wherein the second non-volatile memory has a greater storage capacity than the first non-volatile memory, and wherein the first non-volatile memory has the same address configuration as the second internal non-volatile memory*”.

Nicholson does not teach or suggest these limitations. In particular, Nicholson does not teach or suggest **wherein the first non-volatile memory has the same address configuration as the second internal non-volatile memory**.

For at least these reasons, claim 20 and its dependent claims are believed to be allowable over Nicholson.

Conclusion

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

Request For Telephone Interview

The Examiner is invited to call Brent E. Vecchia at (303) 740-1980 if there remains any issue with allowance of the case.

Request For An Extension Of Time

The Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17 for such an extension.

Charge Our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 10/2/06

Brent E. Vecchia
Brent E. Vecchia
Reg. No. 48,011

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025-1030

ANNOTATED SHEET SHOWING CHANGES
Title: MEMROY OPTIMIZATION FOR A COMPUTER SYSTEM HAVING A HIBERNATION
MODE

1st Named Inventor: Marco Sirasinghe

Application No.: 10/643,826

Docket No. 42P15529

Figure showing changes

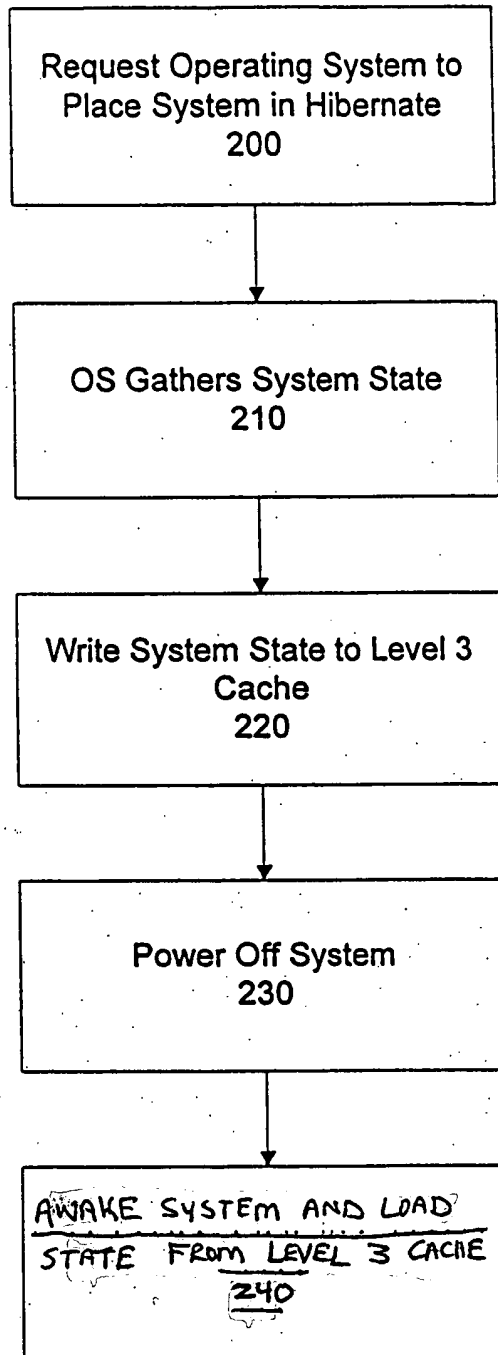
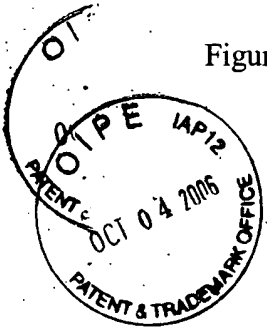


FIG. 2